



X-Plain™

Diagnostic Laparoscopy

Reference Summary

Patients that have an undiagnosed problem in the abdomen or pelvis may be asked to have a diagnostic laparoscopy.

Diagnostic laparoscopy allows the doctor to see inside the abdomen by using medical scopes attached to special video cameras.

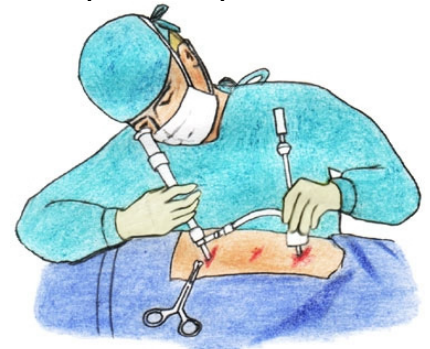
If your doctor recommends a diagnostic laparoscopy for you, the decision whether or not to have this procedure is yours.

This patient education tutorial will help you better understand the benefits and risks of diagnostic laparoscopy. The tutorial discusses when the procedure is needed and what to expect before, during, and after the procedure.

What Is It?

A laparoscope is a medical scope inside a hollow, thin tube. The laparoscope is inserted inside the body through small incisions. It is connected to a high-intensity light and a camera so the doctor can see structures inside the body.

Certain problems of the abdomen cannot be fully diagnosed through physical examination, x-rays, and other radiological tests. Diagnostic laparoscopy allows the doctor to look directly at the structures of the abdomen and pelvis.



The remaining part of this section lists some structures in the abdomen and pelvis.

Structures of the digestive system include:

- The liver and gall bladder
- The stomach and small intestines
- The pancreas

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- The colon and appendix

Structures of the urinary system include:

- The kidneys
- The ureters
- The urinary bladder

Structures of the female reproductive organs include:

- The uterus
- The fallopian tubes
- The ovaries

When Is It Needed?

Many medical conditions can require a diagnostic laparoscopy. The following are descriptions of some of these conditions. Your doctor will tell you which one may apply to you.

There are many causes of abdominal pain. Diagnostic laparoscopy can help to diagnose the cause of pain. Causes of abdominal pain include inflammation of an organ, scar tissue, adhesions, infection, internal bleeding, fluid accumulation, or cancer.

Sometimes the doctor or the patient can feel a lump or mass in the abdomen. The mass may also be discovered by x-ray. Diagnostic laparoscopy is used to look directly at the mass and obtain a tissue sample for diagnosis. This is called a biopsy.

Diagnostic laparoscopy can also be used to detect ectopic pregnancy, which is when the fertilized egg grows in the Fallopian tube instead of the uterus. It can also detect endometriosis and other problems of the female reproductive organs. For these kinds of uses, it is also called gynecologic laparoscopy.

Before The Procedure

Diagnostic laparoscopy is usually ordered after other diagnostic tests, such as CT scan, MRI, or ultrasound, are done.

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Before diagnostic laparoscopy, the doctor usually orders routine blood tests and urine tests. In some cases a chest X-ray or an electrocardiogram may be needed.

Most diagnostic laparoscopies are performed in an outpatient setting, which means you go home the same day the procedure is performed.

You should not drink or eat for 8 hours before diagnostic laparoscopy.

You can shower the evening before your scheduled operation. Cleaning your belly button with soap, water, and a cotton swab is a good idea.

If you take medications, discuss this with your surgeon. If you take a blood thinner or aspirin regularly, inform your doctor prior to scheduling the operation. The effects of blood thinners need to be stopped before a laparoscopy to avoid excessive bleeding during the operation.

Your doctor will give you more specific instructions to prepare for diagnostic laparoscopy. Instructions differ based on the age and medical condition of the patient.

The Procedure

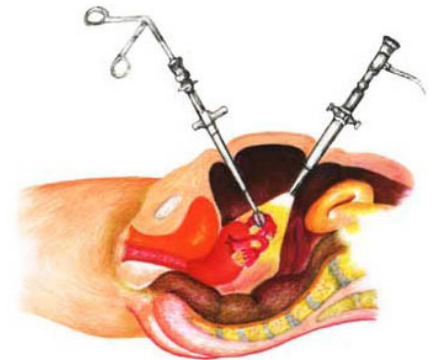
Diagnostic laparoscopy is most often performed under general anesthesia, rarely it can be done under local or regional anesthesia.

If you know of any allergy you have to an anesthetic medicine, tell your doctor or nurse anesthetist. With general anesthesia, the patient is asleep and does not feel any pain.

A catheter is inserted through the urethra into the bladder to empty it. The skin of the abdomen is cleansed and sterile drapes are applied. A small incision is made above or below the navel.

A needle is inserted into the incision and a gas is injected into the abdominal cavity. The gas expands the abdominal cavity, making it bigger. This makes it safer for the doctor to see and examine the body organs.

The laparoscope is inserted and the organs are examined. If needed, additional smaller incisions are made for instruments that allow the doctor to move and hold body tissues and organs.



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When the doctor is finished with the examination or the biopsy, the laparoscope is removed and the incisions are closed with sutures. Finally, the bandages are applied. The smaller incisions may be closed with band-aids only.

If there is a lot of scarring or if a complication arises, your surgeon may have to change the operation to an open one with a regular incision.

Risks & Complications

Diagnostic laparoscopy is very safe. However, like any surgical procedure, there are several possible risks and complications. These are very unlikely, but possible. You need to know about them in case they happen.

The risks and complications include those related to anesthesia and those related to any type of surgery. Risks of general anesthesia include nausea, vomiting, urinary retention, cut lips, chipped teeth, sore throat, and headache. More serious risks of general anesthesia include heart attacks, strokes, and pneumonia.

Your anesthesiologist will discuss these risks with you and ask you if you are allergic to certain medications.

Some of the risks are seen in any type of surgery. These include:

1. Infection, deep or at the skin level. Antibiotics are usually given as a precaution.
2. Bleeding in the abdominal cavity.
3. Skin scars that may be painful or unsightly.

The following risks are related specifically to this surgery. Again, these are very rare. However, it is important to know about them.

In rare cases, structures in the pelvis and abdomen may be injured during this procedure. This rare complication is more common if the patient has internal scars from previous surgeries.

Rarely, the tubes connecting the kidneys to the bladder, as well as the bladder itself, become injured. If this does happen, another operation may be necessary.

In extremely rare situations, the intestines and blood vessels could be affected, necessitating another operation. This may mean an immediate operation with a larger incision.

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Very rarely, small nerves in the pelvis may be injured, resulting in decreased sensation in the sexual organs.

After The Procedure

After diagnostic laparoscopy, you will be taken to a recovery area for a few hours. You will be monitored closely until the sedatives and anesthetics have worn off.

Since you will feel drowsy after anesthesia, you should have somebody drive you home after the procedure. This is especially true if general anesthesia is used.

Expect some soreness and pain around the incision sites; this is normal. You may need to take pain medication. The pain will go away in a few days and get better every day.

You may experience shoulder pain for a few days, which is also normal. The gas may irritate the diaphragm, the big muscle that separates the lungs from the abdomen. The diaphragm shares some of the same nerves as the shoulder.

You may experience an increased urge to urinate since the gas can put pressure on the bladder.

Avoid lifting or bending until your incisions heal.

Your doctor will tell you how long it will take before your incisions are completely healed and when you can go back to work. This depends on your age, type of work, medical condition, and other factors. In some cases, you can go back to work the same day.

You should call your doctor if you develop any of the following:

- Fever, chills, or vomiting
- Drainage from the incision or increased redness at the incision site
- Severe pain that cannot be controlled by medication
- Inability to urinate or severe leg pain
- Other unusual symptoms



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Conclusion

A diagnostic laparoscopy allows the doctor to look directly at the organs in the pelvic and abdominal areas in order to diagnose a problem.

A laparoscopy may also allow the doctor to treat a problem or obtain a sample of tissue for analysis.

Diagnostic laparoscopy is a very safe and successful procedure. Complications are rare but may occur. Knowing about them may help you detect them early so they can be promptly treated in case they happen.



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